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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY Docket NO.	CONFIRMATION NO.
10/044,936	01/15/2002	Takayuki Tsukamoto	03500.016112	1495

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EXAMINER

BUDD, MARK OSBORNE

ART UNIT PAPER NUMBER

2834

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/044,936	TSUKIMOTO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Mark Budd	2834	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-17, 20-27 and 30-32 is/are allowed.
- 6) ☒ Claim(s) 1-8, 18, 19, 28 and 29 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:  
    1. ☐ Certified copies of the priority documents have been received.  
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                     | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                            | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4-02</u> . | 6) <input type="checkbox"/> Other:  |

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Claims 18, 29, 28 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims are vague, indefinite and/or based on an inadequate disclosure. In claims 18 and 19 "one end portion" of what has "an increased diameter" relative to what? Claims 28 and 29 are drawn to circuitry, yet no circuit diagrams or written description of any circuitry is contained in the original disclosure. Also, in claim 29 "which causes a less distortion" relative to what standard?

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Tsukimoto, Mishiro, Myohga, Tami or Uchikawa.

Tamai (fig. 3 & 10A), Tsukimoto (figs. 3, 4, 7 and 9-29), Myohga (figs. 1, 3, 4 and 6) and Mishiro (fig. 1), Uchikawa (figs. 1, 3, 7, 10 & 11) all teach a vibration wave driving apparatus having first and second elastic elements sandwiching an electro-mechanical energy conversion element. Note that the "wherein" clause is merely a statement of desired function with no specific structural features defined to perform the function. As such, it does not limit the structural

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recitations of the claim. Regardless, each reference also utilizes different relative ratios at each end of the stator assembly.

Claims 2, 3, 6, 7, 8, 18, 28 and 29 are rejected under 35 U.S.C. 102(a) as being anticipated by Mishiro (fig. 1), Uchikawa (figs. 1, 3, 7, 8, 10 and 11), Tsukimoto (fig. 28) and Myohga (fig. 4).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchikawa or Tsukimoto in view of Endo or Fujimura.

Uchikawa and Tsukimoto teach the vibration element except for the relative sizes of the mass diameters. However, optimization of a known device (e.g. thru routine experimentation) has long been held to be within the skill expected of the routineer. Also, each of Endo (note #14 v 32a, 2b, 2c) and Fujimura (#4 v #6) teach either the top or bottom mass can be a different diameter. Thus to select relative sizes of a first mass and second mass for Uchikawa or Fujimura would have been obvious to one of ordinary skill in the art.

Claim 9 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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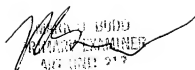
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Claims 10-17, 20-27 and 30-32 are allowed.

Further cited of interest is Yano.

Budd/ds

06/27/03

  
MARK A. BUDD  
ATTORNEY  
JUL 1 2003